

REMARKS

Figure 12 has been amended to show drawing elements 53 and 54 as described in the specification. New Figures 14 and 15 have been added to illustrate the disclosure on page 11, lines 10-23. The specification has been amended to make reference to new Figures 14 and 15. No new matter has been added. Claims 14-25 are pending in this application.

Objections to Drawings

The drawings were objected to under 37 CFR 1.83(a) as failing to show a structural detail essential to the understanding of the invention. The Office Action asserts that "newly formed initial edge 56" is not shown in the drawings. Applicants respectfully traverse this objection. Figure 12 as filed includes drawing element 56, which is positioned just to the left of the end of transfer blade 55 and between drawing elements 61 and 52. Drawing element 56 is also shown in Figure 12 as amended and in new Figures 14 and 15.

The drawings were further objected to under 37 CFR 1.83(a) as failing to show each and every feature of the claims. The Office Action asserts that the various methods of breaking the sheet of material recited in claims 15, 16 and 18 are not sufficiently shown in the drawings. It is noted for the record that claim 16 does not recite the breaking of the sheet, and it is assumed that the Office Action intended to refer to claim 17 instead.

The objection to the drawings with respect to claims 15, 17 and 18 has been obviated by appropriate amendment. In new Figure 14, the sheet 51 is illustrated as having been broken by the movement of the transfer blade 55. The unbroken sheet before the movement of the transfer blade is illustrated in Figure 11. Accordingly, the method of breaking the sheet as recited in claim 15 is sufficiently shown in Figures 11 and 14. It is noted that new Figure 14 is substantially identical to Figure 12 as originally filed. In new Figure 15, the sheet 51 is illustrated as having been broken by the stress

applied by the nip rolls 53 and 54, where the unbroken sheet before the movement of the stress application is illustrated in Figure 11. Accordingly, the method of breaking the sheet as recited in claim 17 is sufficiently shown in Figures 11 and 15. In amended Figure 12, the sheet 51 is illustrated as having been broken by the movement of the transfer blade 55 in combination with the stress applied by the nip rolls 53 and 54. The unbroken sheet before the movement of the transfer blade is illustrated in Figure 11. Accordingly, the method of breaking the sheet as recited in claim 18 is sufficiently shown in Figures 11 and 12.

Objection to Specification

The specification was objected to under 37 CFR 1.71 as being unclear with respect to the diversion of a sheet of material away from a processing apparatus. The Office Action asserts that is not clear which direction the sheet is originally traveling. Applicants respectfully traverse this objection. The specification, with reference to Figure 11, describes an intake area 52 of a processing apparatus. The original direction of travel of the sheet of material prior to being diverted is thus the direction between the source of the sheet 51 and the intake area 52. This is consistent with the plain meaning of the language "... diverted away from the intake area ..." in the specification (p. 10, lines 25-26). If the sheet is diverted from a particular destination, then that destination marks the end of the original direction of travel. Figure 12, both as originally filed and as amended, only emphasizes this original direction of travel, as it shows new initial edge 56 being directed toward the intake area 52. Applicants submit that the specification as filed fully meets the requirements of 37 CFR 1.71.

Rejections under 35 U.S.C. § 112

Section 112, 1st Paragraph

Claims 14-25 were rejected under 35 U.S.C. § 112, 1st paragraph, as containing subject matter not described so as to enable one skilled in the art to make or use the invention. The Office Action asserts that the specification fails to teach how the sheet of material is diverted away from the processing apparatus. The Office Action asserts that the specification also fails to teach separate means for directing the sheet of material toward and away from the processing apparatus.

The rejection of the claims as not providing an enabling disclosure is respectfully traversed. The discussion of the apparatus and method related to Figures 11-15 (p. 10, line 23 – p. 13, line 10) provide adequate disclosure of the role of the nip rolls in diverting the sheet of material away from the processing apparatus. With respect to claim 14, the phrase "... is diverted away from a processing apparatus ..." is merely describing the state of the sheet of material prior to its being directed toward the processing apparatus. Referring to Figures 11-15, it is clear that the portion of the sheet of material 51 that is passing between the nip rolls 53 and 54 is no longer traveling to the intake area 52 of the processing apparatus. That portion of the sheet is inherently diverted or directed away from the processing apparatus. At least one function of the nip rolls is to maintain the sheet in a diverted state until the processing apparatus is ready to receive additional sheet material. Accordingly, independent claim 14 is fully enabled by the specification, and Applicants request that this rejection be withdrawn.

With respect to claims 23-25, the disclosure of the apparatus and method related to and including Figures 11-15 provide adequate examples of the structures of the means for performing the various functions recited in the claim. The means for directing the sheet toward a processing apparatus may include the rollers and belts illustrated near the intake area 52, near the idler nip 57, and/or near the extended position 61. When the sheet of material is traveling from a source (to the right of idler nip 57) to a processing apparatus (to the left of intake area 52), one or more of these sets of belts or

rollers may be in contact with the sheet of material, directing the sheet to the processing apparatus. The means for directing the sheet may further include the idler nip and the shield 58, depending on the configuration of the apparatus and the position of the shield (p. 11, lines 24-28). The means for cutting the sheet may include the transfer blade 55, as the path of the blade between the retracted position 60 and the extended position 61 intersects the path of a sheet of material that would be directed from the source to the intake area. The means for directing the sheet away from the processing apparatus may include the shield 58, which can be moved toward or away from the web (p. 11, lines 25-27). Once the sheet has been cut, the sheet may naturally fall so as to pass between the nip rollers 53 and 54, and the shield may be moved to a lower position to further urge the sheet away from the intake area. The means for simultaneously cutting the sheet and directing the sheet toward the processing apparatus may include the combined action of the transfer blade, the idler nip roll and shield, and the nip rolls (p. 11, lines 10-23). With respect to dependent claim 24, the means for cutting the sheet into sections may include the nip rolls, which can break the sheet by increasing their speed of rotation (p. 11, lines 12-14). If the transfer blade is not actuated to thread the newly formed edge, the sheet can continue to be diverted between the nip rolls after the sheet is broken. Accordingly, claims 23-25 are fully enabled by the specification, and Applicants request that this rejection be withdrawn.

Section 112, 2nd Paragraph

Claims 14-22 were rejected under 35 U.S.C. § 112, 2nd paragraph, as being indefinite. The Office Action asserts that is not clear what diverts the sheet away from the processing apparatus. The rejection of the claims as indefinite is respectfully traversed. As noted above, the phrase "... is diverted away from a processing apparatus ..." in claim 14 is merely describing the state of the sheet of material prior to its being directed toward the processing apparatus. At least one function of the nip rolls is to maintain the sheet in a diverted state until the processing apparatus is ready to receive additional sheet material (p. 10, lines 25-26). With respect to the Office Action's question regarding the function of the transfer blade, at least one function of the transfer

blade is to deliver the sheet to the intake area of the processing apparatus, although the blade may also be responsible at least in part for breaking the web (p. 11, lines 15-23). Applicants submit that claims 14-22 fully meet the requirements of 35 U.S.C. § 112, 2nd paragraph and request that this rejection be withdrawn.

Rejections under 35 U.S.C. § 103

Dambroth in view of Bolton

Claims 14-16 and 19-22 were rejected under 35 U.S.C. § 103(a) over Dambroth (U.S. Pat. No. 3,817,467) in view of Bolton (U.S. Patent No. 4,493,684). The Office Action asserts that Dambroth teaches the apparatus as claimed except for the presence of nip rolls. The Office Action asserts that Bolton teaches a pair of nip rolls that create tension in a sheet of material, and that the addition of these nip rolls to the apparatus of Dambroth would provide the apparatus as claimed. The rejection of the claims under 35 U.S.C. § 103(a) is respectfully traversed. The applied references, alone or in combination, fail to provide each and every element of the claims, and there is no suggestion or motivation to combine the references.

Applicants respectfully disagree with the Office Action's characterization of the disclosure of Dambroth. The Office Action has defined the processing apparatus of Dambroth as including only the intake rollers I and II, the mounting member 16 and the magazine 18, and has characterized rollers III and 12 as being "away from the processing apparatus" (Paper No. 7, p. 5, lines 1-4). This characterization is in conflict with the overall disclosure of Dambroth, which includes Figures 1, 2 and 8. These Figures, and their accompanying disclosure, cannot be separated from Figures 4, 5 and 9, which were cited in the Office Action. Figures 1, 2 and 8 clearly show that the delivery roller III and the takeup spool 12 are part of the processing apparatus and are not a separate device that exists away from the processing apparatus (col. 2, lines 10-14). The roll winder processing apparatus of Dambroth winds a sheet of material onto the takeup spool 12, and this winding is improved by the higher speed of rotation of roller III (col. 2, lines 19-22). Thus, takeup spool 12 and roller III cannot divert the sheet

away from the processing apparatus, since the roll on the spool is the final product of the apparatus.

Moreover, the combination of Dambroth and Bolton cannot provide each and every element of the apparatus as claimed. The Office Action has asserted that the nip rollers of Bolton could be positioned "adjacent Dambroth's rolls 12 and III" to improve the operation of the apparatus (Paper No. 7, p. 5, lines 9-12). Referring again to Figures 1, 2 and 8 of Dambroth, such an arrangement would be physically impossible, as the additional nip rollers would either be in the middle of the roll winder processing apparatus or upstream of the processing apparatus. In either scenario, the nip rolls would not divert the sheet of material away from the processing apparatus but rather would direct the sheet into or through the processing apparatus. Thus, the combined references do not teach or disclose nip rolls as recited in Applicants claims. In addition, it is unclear how the addition of the nip rollers of Bolton could possibly benefit the apparatus of Dambroth. Thus, the Office Action has not provided a suggestion or motivation to combine the references that is consistent with the disclosure of the references. The combination of Dambroth and Bolton does not teach or suggest each and every element of claims 14-16 and 19-22, nor is there a valid suggestion or motivation to combine the disclosures of the references. Accordingly, a *prima facie* case of obviousness has not yet been presented, and Applicants respectfully request that this rejection be withdrawn.

Dambroth and Bolton in view of Lotto et al.

Claims 17, 18 and 23-25 were rejected under 35 U.S.C. § 103(a) over Dambroth in view of Bolton, and further in view of Lotto et al. (U.S. Patent No. 5,588,644). The Office Action asserts that the combination of Dambroth and Bolton teaches the apparatus as claimed except for the capability of breaking the sheet of material by the increased speed of rotation of the nip rolls. The Office Action asserts that Lotto et al. teaches the breaking of a sheet of material by passing the sheet between a pair of nip rolls and increasing the speed of the nip rolls, and that the operation of nip rolls in this

manner in the combined apparatus of Dambroth and Bolton would provide the apparatus as claimed. The rejection of the claims under 35 U.S.C. § 103(a) is respectfully traversed. The applied references, alone or in combination, fail to provide each and every element of the claims.

As shown above, the combination of Dambroth and Bolton fails to provide each and every element of the apparatus as recited in independent claim 14, nor is there a suggestion or motivation to combine the references. With respect to independent claim 25, the combination of Dambroth and Bolton does not provide any means for directing the sheet away from the processing apparatus. The Office Action has asserted that either the uptake roller and delivery roller of Dambroth or the nip rolls of Bolton provide this means. However, neither of these pairs of rollers are nip rolls as claimed, as the references do not teach or suggest that the sheet is diverted away from a processing apparatus.

The Lotto et al. reference does not make up for the deficiencies of Dambroth in combination with Bolton. Lotto et al. does not teach or suggest, nor does the Office Action assert that Lotto et al. teaches or suggests, nip rolls that divert a sheet away from a processing apparatus. The nip rolls 34a and 34b of Lotto et al. are upstream of the processing apparatus, which is an overlapping machine and/or a winder. The sheet of material that passes between the nip rolls is ultimately delivered to a winder that produces a roll of overlapped sheets (col. 1, lines 19-46). Thus, the nip rolls of Lotto et al. actually direct the sheet toward the processing apparatus rather than diverting the sheet away from the processing apparatus. With respect to claims 23-25, Lotto et al. does not teach or suggest, nor does the Office Action assert that Lotto et al. teaches or suggests, any means for directing the sheet away from the processing apparatus. The disclosure of the increased speed of rotation of the nip rolls of Lotto et al. does not affect the combined teachings of Dambroth and Bolton, as none of these references teaches or discloses either nip rolls or a means for directing the sheet away from the processing apparatus, as recited in the claims.


The combination of Dambroth, Bolton and Lotto et al. does not teach or suggest each and every element of claims 17, 18 and 23-25. Accordingly, a *prima facie* case of obviousness has not yet been presented, and Applicants respectfully request that this rejection be withdrawn.

CONCLUSION

In conclusion, all of the grounds raised in the outstanding Office Action for rejecting the application are believed to be overcome or rendered moot based on the remarks above. Thus, it is respectfully submitted that all of the presently presented claims are in form for allowance, and such action is requested in due course. Should the Examiner feel a discussion would expedite the prosecution of this application, the Examiner is kindly invited to contact the undersigned.

Respectfully submitted,

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